Filing Date: July 3, 2003
Title: METHODS, DATA STRUCTURES, AND SYSTEMS FOR AUTHENTICATING MEDIA STREAM RECIPIENTS

## IN THE CLAIMS

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Please amend the claims as follows:

1. (Currently Amended) A method to authenticate a media stream recipient, comprising: automatically receiving an authentication request from a media player when a recipient attempts to use the media player to play a media stream, the media stream includes the media player and media content and the media content is in a format known only to the media player and is not accessible to the recipient until the media player determines that the recipient is authenticated for access and the media player generates authentication information on behalf of the recipient and supplies that authentication information with the authentication request, and wherein the media player is self-loading and self-extracting from the streamed media stream within a computing environment of the recipient, and self-loads and executes when the recipient attempts to use the media player to play the media content, and wherein when the recipient receives the media content via the media stream the recipient receives with that media stream the media player:

verifying that the recipient is authorized to play the media content of the media stream in response to the media player supplied and generated authentication information; and

sending an authentication token to the media player over a network connection, when the recipient is authorized, and wherein the media player automatically plays the media content once the authentication token is received by the media player, and wherein the authentication token serves as an electronic acknowledgement that it is okay to play the media content, and wherein the media player and the media content temporarily reside in volatile memory of a recipient computing device associated with the recipient and once the media content is played for the recipient the media player and content are removed from volatile memory and no longer available on the recipient computing device thereby requiring the recipient to re-acquire the media content and the media player each time the media content is played by the recipient.

- (Original) The method of claim 1 wherein the sending further comprises automatically
  installing the authentication token as a licensing key on a computing device of the recipient,
  wherein the licensing key can include licensine limitations.
- 3. (Original) The method of claim 1 wherein in automatically receiving, the recipient initially obtains the media player and media stream from a second recipient.
- (Original) The method of claim 1 wherein in verifying, the recipient is verified by
  externally contacting a licensing service with at least one of an identity of the recipient and an
  identification of the media stream.
- (Original) The method of claim 1 wherein in sending, the authentication token includes limitations that instruct the media player to self destruct the media stream upon the occurrence of an event or pre-defined time.
- (Original) The method of claim 1 wherein in sending, the authentication token includes limitation that instruct the media player to prevent the recipient from re-streaming the media stream to a downstream recipient.
- 7. (Original) The method of claim 1 wherein in sending, the authentication token is at least one of a digital certificate and a digital signature.
- (Currently Amended) A media stream structure stored/embodied on a computer readable medium, comprising:

media player logic;

media content; and

media recipient authentication logic included within the media player logic;

wherein when the media stream data structure is streamed to a computing device, the media player logic is self-loading and self-installing on the computing device when a recipient associated with the computing device attempts to play the media content, the recipient receives the media player logic with the media content via the media stream data structure, and the media player logic executes the media recipient authentication logic before playing the media content by generating authentication information on behalf of the recipient, and wherein the media recipient authentication logic sends an authentication request having the authentication information to an authentication service over a network along with the identity of a the recipient of the media content, and wherein the media player logic automatically plays the media content when the authentication request is successful, and wherein the media content is in a format known only to the media player logic and the media player logic only plays the media content when the recipient is successfully authenticated by the authentication service in response to the media player logic generated and supplied authentication information, and wherein the media stream structure is encoded before it is streamed to the computing device with a security identification, the computing device also has a same security identification, and the security identification is based on an Internet Protocol (IP) address of the computing device and the media content requires a match on the security identification of the media stream structure with the security identification of the computing device before the media content is permitted to play, and wherein a valid license for the media player logic is needed on the computing device before the media player logic can play the media content on the computing device for the recipient.

- Q (Original) The media stream data structure of claim 8 wherein the media recipient authentication logic also sends an identification of the media content to the authentication service
- 10. (Original) The media stream data structure of claim 8 further comprising an authentication token, which is added to the media stream data structure if the identity of the recipient is authorized to play the media content on the computing device by the authentication service.
- 11. (Original) The media stream data structure of claim 10, wherein the authentication token is stored external to the media stream data structure and is identified within the media stream data structure as a pointer reference.

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12. (Original) The media stream data structure of claim 8 wherein the media recipient authentication logic also sends at least one of settings associated with a computing environment of the computing device and an Internet Protocol (IP) address associated with the computing device to the authentication service.

- 13. (Original) The media stream data structure of claim 8 wherein the authentication service authenticates the identity of the recipient by interfacing with one or more external licensing services.
- 14. (Original) The media stream data structure of claim 8 wherein the media player automatically plays the media content if a valid authentication token is received from the authentication service.
- 15. (Currently Amended) A media content authentication system, comprising: a distribution service for distributing media streams via streaming to recipients, wherein each media stream includes media eontent content; and a self-installing, self-loading, and self-executing media player, the media content and media player are streamed together to the recipients, and the media content is in a format known only to the media player and the media player self-installs, self-loads, and self-executes when the recipients attempt to play the media content; and

an authentication service that subsequently communicates with each media player over a network in order to authenticate access to the recipients that attempts to play the media content, and wherein each media player initiates the communication with the authentication service when it self-executes in an environment of a recipient to which it relates and each media player generates and supplies authentication information with the communication to the authentication service, the authentication information for a particular recipient to which a particular media player relates, and when authentication is successful each media player automatically plays media content included in the media stream, and wherein the authentication information includes identities for the recipients, identifications for the media content, identifications for the media

streams, an Internet Protocol (IP) addresses for computing devices of the recipients, settings for each computing device's electronic environment, identifications for the media players, identifications for any previous sender or previous recipient of the media streams, and identities for content providers that own the media streams.

- 16. (Original) The media content authentication system of claim 15 wherein each media player that self-installs contacts the authentication service immediately after it initially installs on a recipient's computing device.
- 17. (Original) The media content authentication system of claim 15 wherein each media player receives an authentication token from the authentication service, if a corresponding recipient is authorized to play the media content.
- 18. (Original) The media content authentication system of claim 15 wherein the authentication service uses a licensing service to authorize a number of the recipients for access to the media content.
- 19. (Original) The media content authentication system of claim 15 wherein the authentication service receives information from each of the media players that is used to authenticate each of the recipients, and the information includes at least one of settings of a computing environment that is executing the media player, an identity of the recipient, and an identification of the media content
- 20. (Original) The media content authentication system of claim 15 wherein the authentication service returns authentication tokens to each of the media players that have authorized recipients and the authentication tokens are at least one of a digital certificates, digital signatures, encrypted data, and hidden data.